



# Shaping the future of Abu Dhabi



# The core of any urban strategy for Abu Dhabi must be its people



## Introduction

Stable population growth is central for any city looking to establish itself as a sustainable, mature market. The global pandemic has reshaped the way we live and highlighted the need for sustainability, putting into question what future urban environments will look like. Abu Dhabi has a significant opportunity now to plan ahead and set a precedent for future cities.

To advance its position as a leading global city, Abu Dhabi needs to foster communities that will attract and retain a skilled workforce and encourage a culture of innovation. It should be an investment destination where investors feel they're making a real difference to the city and the wider world.

In other words, the core of any urban strategy for Abu Dhabi must be its people; a notion that's gaining ground. As the world gradually emerges from the global pandemic, the realisation will take hold that there have been fundamental shifts in the way we socialise, interact and undertake trade and commerce, which will have permanent and lasting impacts for people and places. We believe that to lead as innovators and remain competitive on the global stage, cities must build inspiring places, create resilience, foster inclusive communities and provide seamless and safe connectivity.

GHD has been operating in Abu Dhabi for over 20 years and we've recently played a part in some hugely important people-focussed projects: developing the Hudairyat Leisure and Entertainment District on Hudairyat Island; New York University; advising within Agri-Tech as part of the Emirates' Food Security ambitions; and helping the magnificent Jubail Mangrove Park come to fruition. We've seen first-hand the positive impact these projects have had on the community.

In this report, we look at why a people-focussed approach to urbanisation is so important; ways it can be achieved; and the positive impacts of a successful implementation.

Together, Abu Dhabi and GHD have already achieved so much. But we believe the best is yet to come. Here's to the next chapter and our commitment to creating a sustainable future for our communities.

**David Kinniburgh**

UAE Regional General Manager

# Constructing identity

## Reimagining public and private spaces to create an inspiring and investable city

The world is undergoing a period of rapid change, not least due to factors brought on by the Covid-19 pandemic. Changes to the socio-political sphere, technology, the economy and natural environment are driving a re-think in how communities can remain strong, vibrant, and competitive without losing social cohesion and connection to place.

When it comes to reimagining the built environment in a changing world, Abu Dhabi is in an enviable position. The city's now-ageing buildings present an opportunity to repurpose them and reimagine the role of public and private spaces with the needs of communities front of mind.

Andrew Parker, GHD's Technical Director for Design and Planning in the UAE, emphasises the need for master planning and building a design language. "When you come to Abu Dhabi, you want to know you're in Abu Dhabi", he says. "There's an opportunity here to create an authentic sense of what Abu Dhabi is."



# 11.3M

**International visitors welcomed by Abu Dhabi in 2019 - a new record**

*Source: Department of Culture and Tourism - Abu Dhabi*

A big focus, then, needs to be how to use the built environment to create a differentiated identity — and through that, to create a quality of life that encourages people to stay and put down roots.

People's needs should not be underestimated when it comes to shaping a community. Our experience in master planning and design in cities like Sydney and Melbourne – places that rate in the top 3 on the global liveability scale – has taught us that building an inspiring place means putting the person at the centre.

"Abu Dhabi's needs are changing", Andrew sums up. "It's no longer about building the world's tallest tower or the latest five-star resort. The goal is to become a more mature, established global player with a distinct and unique local identity. And to do that, and to attract that investment, [Abu Dhabi] needs to foster truly inspiring places that bring communities together."

### » The work we completed on the Saadiyat Beach apartments is a prime example of this ethos in action.

GHD led the master planning and design of the first phase of apartment development within Saadiyat Island, with the idea of building a beachside community at the heart of it.

The aim was to create a unique space that promoted a coastal lifestyle, thoughtfully designed around views to the water and access to communal facilities, with no high-rise accommodation in sight. Convenience and comfort were both important factors, with on-site amenities and a family-friendly feel throughout.

Today, the apartment community flourishes on Saadiyat Island, and its beachside location and easy access to some of the city's best schools and major employers means it has become one of Abu Dhabi's most sought-after neighbourhoods. The residents have weathered the Covid-19 pandemic comfortably: the self-contained nature of the development minimises the need to travel and presents a ready-made social bubble.

# Innovating resilient resources

## Driving in-country value for an adaptable and sustainable society

Disasters rapidly expose the flaws in supply chains, labour markets, taxation systems, infrastructure, governance and much more. As more natural, economic, environmental and health shocks emerge, communities must be able to adapt quickly while protecting people and giving them hope for a positive future.

The UAE's food security strategy has been accelerated in the wake of the biggest global disaster in recent history. In a country that imports around 80–90% of its food, Abu Dhabi has dealt with the challenge impressively and proven its potential, pushing food security to the top of the agenda. Currently ranking 31st on the Global Food Security Index, the UAE government has set a goal to top the list by 2051 and reach the top ten in 2021.

“A lot of the requirements around ranking highly in the Global Food Security Index involve growing food”, explains Salma Bin Breik, Manager of the UAE Advisory Team at GHD. “That’s why Abu Dhabi is focussing on innovation in the food industry, sustainable agricultural practices and investing in the right technology”.

GHD's Advisory team has been working with the government on how to enable food security and build resilience now



» We've recently worked with Abu Dhabi Ports to create purpose-led transformation through co-designing an array of solutions to their challenges in a series of workshops.

We helped to reframe their thinking and re-imagine what ports can do when it comes to responding to the challenges of the future. As we look to solve the problems of the future hand-in-hand with clients, nurturing and encouraging new and different ways of thinking is what will get cities ahead in both attracting the right talent and building a desirable investment destination.

and in the future, with Abu Dhabi playing a key role due to its geographic location, developed logistics infrastructure and financial stability.

“We're working on a plan to support the UAE to achieve these ambitious goals, namely through the implementation of Agri-Tech”, says Salma. “We've been working in Abu Dhabi with AeroFarms, one of the world's biggest Agri-Tech providers, on the design and build out for AeroFarms state-of-the-art research and development Indoor Vertical Farm that will feature centres of excellence, from seed genetics to robotics, and help serve as the nexus for next generation Agri-Tech innovation.”

Not only will a greater degree of food security support the country's drive towards self-sufficiency, it will also offer commercial opportunities. The investment in Agri-Tech in turn brings new opportunities for export, as new types of produce are grown, as well as jobs, food science knowledge is harnessed and brought in-country.

# +40%

**energy and water efficient buildings in Masdar City are designed to be significantly more sustainable than conventional buildings**

Source: <https://masdar.ae/en/about-us/useful-links/facts-and-award>

To solve these complex problems of the future, focus also needs to go on how we think about them. Inspiring innovators to create, achieve and grow is central to the vision for the city according to Abu Dhabi Investment Office.

Investment in renewable energy has also accelerated as a result of the pandemic. Already on the rise thanks to the UAE Energy Strategy 2050, the importance of sustaining energy sources for the future population has really hit home.

As for the future of energy production, with the UAE's aim to increase clean energy from 25% to 50% and reduce the carbon footprint of power generation by 70%, innovation is key. “We need continued investment in renewables, water production and agriculture”, says Sam Mitchell, who heads up Energy and Resources in the UAE. “Greener generation is an obvious area to target, bringing in more sustainable energy and water production to support communities and making it a personal issue for everyone.”

Expect to see solar farms on roofs and more water capture devices, as well as more green space in the built environment. To make life in Abu Dhabi more sustainable and enjoyable, the future of the community and the health and well-being of people is greenery, in every sense of the word.



# Creating social value

## Building inclusive, healthy and balanced communities

How to achieve balanced social, environmental, and economic outcomes is the challenge of a generation. As quoted at this year's World Economic Forum, the Fourth Industrial Revolution is not just about technology or business, it's about society. We must find a way to meet fundamental human needs – health, education, affordable housing, employment, a safe and enriched community life – in an environmentally sustainable way.

Achieving a balanced approach to urbanisation is something that economic hubs like Abu Dhabi are in a position to spearhead. It is also essential for building a knowledge-based economy and moving away from reliance on oil.

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**anticipated growth of the city's population by 2030.**

Source: <https://populationstat.com/united-arab-emirates/abu-dhabi>

"At a city level, a balanced approach to people, planet and profit is crucial. The world only has a finite number of resources, after all. But moving from a linear economy to a circular economy certainly doesn't mean losing economic value", says Hind El Aoufi, UAE Practice Director for Digital Innovation at GHD.

Pioneering a balanced approach to urbanisation doesn't only benefit Abu Dhabi's existing community, it's vital to attract the community of the future, too. Hind notes the shift in mindset of today's workforce. "If you want to attract the best talent, they are going to be purpose-led people. They want to be part of something that is contributing to a better world. They will want to contribute to changing lives for communities and create a better planet."

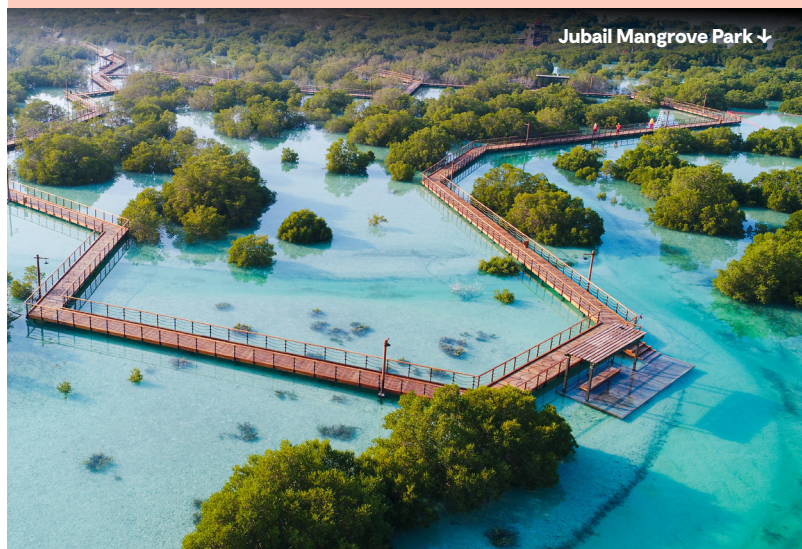
The economic incentive simply isn't enough anymore: a future-led city needs to offer more to attract talent. Building a strong education system, healthcare provision, investment in innovation and new ways of thinking are all key to creating truly balanced communities.



» **Striving for this balance is a journey that Abu Dhabi has already started. The environment, community and economics play equal parts in the award-winning Jubail Mangrove Park, a landmark project that GHD provided multiple services on, including concept design, construction supervision and project management.**

The park plays a key part in the Abu Dhabi government's vision for promoting the natural beauty of the Emirate while maximising its tourist potential. In fact, 100,000 visitors crossed the threshold in the first three weeks of opening.

But the park wouldn't have been a commercial success had the natural surroundings not been respected – indeed, they are the main attraction of the park. It's a prime example of how taking a balanced approach is key, with innovative design and construction utilised to achieve minimal disturbance of the surroundings.



# Connecting communities

## Seamlessly and safely connecting people

People have a fundamental need to connect with each other – our individual and collective health depends on it. But recent events – a pandemic, a global financial crisis – have exposed connectivity vulnerabilities. And all over the world, plans to improve physical connectivity infrastructure have been delayed or even abandoned. However, connectivity isn't just physical, but also virtual. Robust communications networks are also required, and to this extent we have seen an acceleration in the implementation of data centres across the region.

But without real change and significant investment in connectivity, people will become dissatisfied. They'll disengage and relocate. The consequences of halting investment in connectivity for people and productivity cannot be overstated.

Investment in connectivity can have benefits for the wider economy, too. "A metro system for Abu Dhabi is again in planning", notes David Kinniburgh, GHD's General Manager in the UAE. "GHD and partners delivered the recently commissioned Sydney Light Rail PPP catalysing urban regeneration and economic stimulus: a \$2 billion investment resulted in \$10 billion of complementary investment. Good transport infrastructure generates confidence in the development community."

Strong transport links also expand the potential development radius. If there are the means for people to reach an area, the development opportunities there will naturally open up.

The physical mobility benefits of a public transport system shouldn't be downplayed either. A metro network can transform how and where people travel, improving the ease of access to community resources like healthcare and schools. Physically connecting communities is important: it's a key step towards equality.

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# 235K

**annual vehicle sales in the UAE in 2019**

Source: [www.statista.com](http://www.statista.com)

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But could a city of car-lovers be convinced to take the train? "Behaviour is hard to change", David acknowledges. "The climate and heat are factors. But we need the physical building blocks to provide a choice in the way people connect via transport. Because, at the moment, those choices are limited."

And ultimately, it's people that should dictate the direction of investment in connectivity. The pandemic has changed behaviour, with people keen to get outside. The recreational developments that were in the pipeline pre-Covid have accelerated and will be an important part of community infrastructure that is required for a sustainable future.

The chance to connect through history was a concept key to the development of Qasr al Hosn, which GHD steered the design on. The success of such projects is plain to see — destinations that help people connect with each other and contribute to the overall resiliency of the community.

And ultimately, it's what the community thinks that matters, says David. "The community needs to love what we deliver. They're the ultimate judges. If they're happy, then we've met our objective."



# Committed to creating sustainable futures

To achieve its economic growth ambitions and lead as a world city, Abu Dhabi needs to build a more sustainable society that promotes communities built around people. If we are to solve the complex problems of the future, cities need to attract and inspire the innovators of tomorrow.

This will involve investment into greater self-sufficiency for natural resources, high quality transport and communication links, and a balanced approach to development that considers people, planet and profit.

Individually these elements will make an impact. But the way they are integrated is of equal importance. Taking a modal approach to design, Abu Dhabi can create sustainable future communities that put people and human experience at the forefront, which is what will create real distinction.

## \*Talk to us



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## About GHD

**GHD recognises and understands the world is constantly changing. We are committed to solving the world's biggest challenges in the areas of water, energy and urbanisation.**

We are a global professional services company that leads through engineering, construction and architectural expertise. Our forward-looking, innovative approaches connect and sustain communities around the world. Delivering extraordinary social and economic outcomes, we are focused on building lasting relationships with our partners and clients.

Established in 1928, we remain wholly owned by our people. We are 10,000+ diverse and skilled individuals connected by over 200 offices, across five continents – Asia, Australia, Europe, North and South America, the Middle East and the Pacific region.

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